



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,854	02/26/2004	Martin C. Baker	H0002114D2--1060	8472

128 7590 04/24/2007
HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER

ABOAGYE, MICHAEL

ART UNIT	PAPER NUMBER
----------	--------------

1725

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No. -

10/789,854

Applicant(s)

BAKER ET AL.

Examiner

Michael Aboagye

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/26/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krause et al. (US Patent No. 5,321,228) in view of Lemelson (US Patent No. 4,237,364).

Krause et al. teaches laser fusion welding torch system, comprising: a laser beam delivery system formed in an installation or a body and delivered a bout an axis (18 and 18', figure 1); a nozzle adapted to be coupled to a body, the nozzle having an aperture ("18", figure 1) through which a laser beam from the laser beam delivery system may pass; and an independent off-axis on not aligned filler media feed assembly (powder duct "6", figure 1, column 4, lines 31-44) that provides for independent manipulation and control of the laser beam and metal powder. Note said nozzle is connected to a laser installation (column 2, line 22-25) and said installation is composed of a proximal end to receive the nozzle fitted thereof (second end) and a distal end (first end). Note Krause et al. further teaches a plurality of powder delivery

Art Unit: 1725

annular channels within the nozzle which are in fluid communication with the powder supply source (column 2, lines 18-22).

Krause et al., teaches independent off-axis filler media feed or powder feed assembly is operable independent of the laser beam. Note the powder is feed from an independent source by a duct into the nozzle (column 2, lines 17-22).

Krause et al. teaches an off axis a gas flow delivery system operable to transmit gas to an operating site of the torch (gas duct "9", figure 1; column 2, lines 25-31 and column 4, lines 31-43).

Krause et al. also teaches a removable gas cover or cap ("10", is connected to the nozzle by the thread "17", hence and detachable from the nozzle) adapted to detachably couple to the nozzle, the gas cover having an aperture through which the laser beam from the laser beam delivery system may pass when the gas cover is coupled to the nozzle (column 4, lines 31-39).

Krause et al. does not expressly teach a laser fusion welding torch system with a handle to be grasped by a hand and thereby operable as hand held.

However, Lemelson teaches a hand held laser fusion torch system with a handle to be grasped by a hand ("18, 19" figures 1-3; column 1, lines 10-15); said handle or trigger operable to activate a laser bean generating source; wherein a localized area on a workpiece can be targeted for spot welding without distortion or overheating (Lemelson, column 1, lines 25-32).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the laser fusion torch system of

Art Unit: 1725

Krause et al. with a handle or trigger as taught by Lemelson so that the device can be hand held, manually operable and the laser source can be hand activated thereby allowing for localized area on a workpiece can be targeted for spot welding without distortion or overheating (Lemelson, column 1, lines 25-32).

Response to Arguments

3. The examiner acknowledges the applicants' amendment received by USPTO on February 26, 2007. Claims 1- 15 and 20-25 have been cancelled, therefore claims 16-19 are currently under consideration in the application.

4. Applicant's arguments filed February 26, 2007 have been fully considered but they are not persuasive. The applicant in his remarks confirmed that Krause et al. teaches a laser welding nozzle, and discloses a laser beam aperture and a plurality of filler media supply passages. However, applicant argues that Krause et al. fails to disclose, or even remotely suggest, that the nozzle is configured such that the laser beam focal point and the filler material focal point are independently adjustable. It is noted that Kruase et al. similarly discloses as in the applicants claimed invention, a filler media feed or powder feed assembly, which is disposed off the axis of the laser beam. Furthermore Kruase et al. teaches a powder guide cap separate or independent of the laser guide part (see, Kruase et al. column 2, lines 39-42). This suggests separate and independent controls for the laser stream and the filler feed stream. Therefore Kruase et al. system provides for independent adjustment to the laser beam focal point and the

Art Unit: 1725

filler material focal point. Therefore the 35 U.S.C. 103(a) rejections of claims 16-19 by Krause et al. and Lemelson is deemed maintained.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Aboagye whose telephone number is 571-272-8165. The examiner can normally be reached on Mon - Fri 8:30am - 5pm.

Art Unit: 1725

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AM
AM.


Michael Aboagye
Assistant Examiner
Art unit 1725
04/16/2007

KEVIN KERNS *Kevin Kerns* 4/16/07
PRIMARY EXAMINER